

case in a better position for consideration on appeal to the Board of Patent Appeals of the United States Patent and Trademark Office.

Please amend Claims 16 – 18 of the subject application as follows:

16. (Amended) A narrow-band eraser device for use with a presentation board digitizer system, the narrow-band eraser device comprising:

[(a)] a handle;

[(b)] an eraser element having a substantially flat eraser surface; [and]

[(c)] a plurality of contact microswitches located on said eraser surface, such that when a portion of said eraser surface contacts the presentation board, as least one microswitch corresponding to said portion is activated and such that when substantially an entirety of said eraser surface contacts the presentation board, substantially all of said microswitches are activated;

at least one ultra-sound transmitter; and

and at least one infra-red transmitter for identifying contact with said presentation board.

Please delete Claim 17, without prejudice.

18. (Amended) The narrow-band eraser device of Claim [17]16, further comprising at least one reflector for each of said transmitters.

RESPONSE TO FINAL OFFICE ACTION

Response to Examiner's Comments



1. The Applicant thanks the Examiner for the Examiner's comments which have greatly assisted Applicant in responding.

Applicant has amended Claims 16, 18 and 19 and has deleted Claim 17 without prejudice to further clarify the claimed invention. By doing so, the Applicant does not concede that the subject matter of said claims was in fact taught or disclosed by the cited references.

2. Claims 16 – 19 are rejected under 35 USC § 103(a).

To support rejection of any claim under 35 USC § 103(a), the references cited must satisfy the following criteria:

1. There must be some motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings;
2. There must be a reasonable expectation of success; and
3. The prior art reference (or references when combined) must teach or suggest all the claim limitations.

This definition of the prima facie case for obviousness was set forth in *In Re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that the cited references do not offer any motivation to modify the references to make the claimed invention. Applicant also respectfully submits that the knowledge available to one of ordinary skill in the art would not have motivated the artisan to modify or combine the cited references to make the claimed invention. Further, cited references do not teach or suggest all claim limitations of the present invention.

The first reference cited is Mallicoat (hereinafter Mallicoat) US Patent 4,777,329. Mallicoat does not teach the claim limitation of an ultra-sound transmitter in Claim 16 as amended in this paper and presented to the Office

for examination. The second reference cited is Tang et al (hereinafter Tang) US Patent 5325,110. Tang fails to teach or suggest the limitations of the claimed invention.

Here, the Tang reference teaches a graphical icon that can be used on a computer screen and that allows the user to select the size of an eraser. Applicant respectfully submits that it would not be possible to successfully modify Tang to result in a variable eraser size for a physical eraser taught by the Applicant.

Here, Tang is not founded in analogous art, as discussed infra, and hence, the artisan would have no motivation to modify Tang or to combine Tang with Mallicoat.

The two references cited fail collectively to teach all of the claim limitations of the present invention. Due to the irrelevancy of Tang in the context of the current invention, there is no motivation to combine the references to yield the present invention.

The Tang reference cannot sustain a rejection of Claims 16 - 19 under authority of 35 USC § 103(a) because Tang is not founded in *analogous art*.

For the Patent Office to rely on a reference to sustain a rejection under 35 USC § 103(a), the reference must be in the applicant's field of endeavor. If not, then reasonably pertinent to the particular problem with which the inventor was concerned.

This test for use of references based in analogous art was set forth in *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

Further, Tang teaches an eraser that is embodied as an icon that appears on a computer screen. Tang teaches that the eraser icon has a plurality of areas that can be selected using a cursor control device such as a mouse. By sensing which area has been selected, the size of the eraser is modified (1:65-68; 2:1-8). All of this selection process is accomplished in the two-dimensional space of a computer screen. The present invention is concerned with detecting the actual orientation of a physical eraser in three-dimensional space and the contact status of the eraser with a presentation board. These two problems are not related. One deals with a *virtual reality* while the present invention deals with *reality* itself. The skilled artisan would not have been motivated, nor would have had any other cause to look to Tang for guidance pertinent to sensing the orientation and contact status of a physical eraser on a presentation board.

Because Tang is from non-analogous art, Applicant respectfully submits that this reference cannot sustain a rejection under 35 USC § 103(a).

Regarding Claim 17, the Applicant has deleted this claim.

Regarding Claims 18 – 19, the Applicant deems the rejection as moot in light of the fact that Mallicoat does not teach all of the limitations of the present invention. The teaching of Mallicoat requires the eraser device to have microphones, not ultra-sound transmitters. The Applicant directs the Examiners attention to '329, Column 9, Lines 45 – 50. This is further demonstrative of the fact that Mallicoat fails to teach all of the limitations of the present invention.

Modification of the Tang reference renders it unfit for it's intended purpose.

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For the Patent Office to rely on a modified reference to sustain a rejection under 35 USC § 103(a), the proposed modification of the reference can not render the prior art unfit for its intended purpose.

This test for use and modification of references was set forth in *In Re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Tang teaches a special icon for use on a computer screen. Modifying Tang to sense the contact orientation of a real-world eraser would render Tang to no longer be a computer icon.

Because modification of Tang would render it unfit for its intended purpose, it is respectfully submitted that it is not proper to rely on Tang as a modified reference to sustain a rejection under 35 USC § 103(a).

3. With respect to Claims 18 – 19, Applicant deems the rejection moot in further light of Applicant's showing that Mallicoat in light of Tang can not be used to sustain a rejection of Claim 16 under authority of 35 USC § 103(a). The Applicant thereby avers that the dependant Claims 18 through 19, inclusive, all of which stem from Claim 16, are non-obvious. This is supported by *In re Fine*, 837, F.2d 1071, 5 USPQ2d 1596, Fed. Cir. 1988 wherein it was found that if an independent claim is non-obvious under 35 USC § 103, then any claim depending therefrom is non-obvious.
4. Applicant acknowledges the finality of the pending Office Action. Applicant is responding to this Office Action within the two-month response period in hopes that the Examiner will provide a favorable Advisory Action.

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5. Based on the foregoing, Applicant considers the present invention to be distinguished from the art of record. Accordingly, Applicant respectfully solicits the Examiner's withdrawal of the rejections raised in the above referenced Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States patent.

Respectfully Submitted,



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